

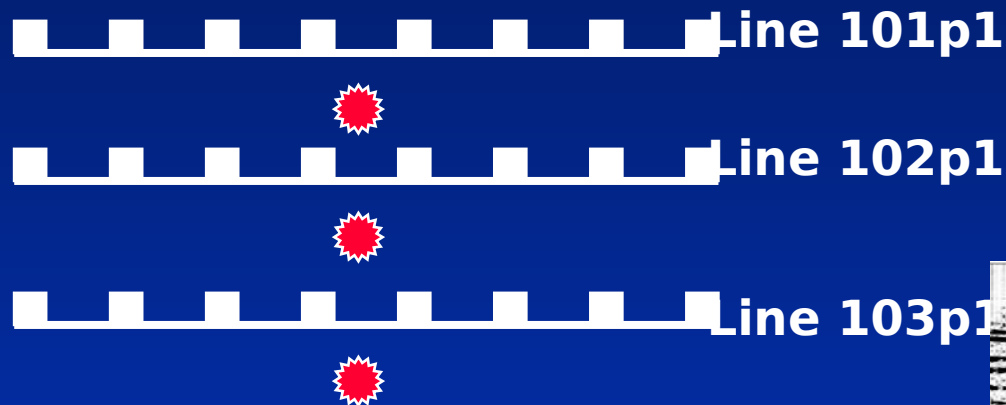
Omega2



At the end of this Session, you will be able to:

- **Define the terms Project, Survey, Phase, Stage, Punit and Child Punit.**
- **Define the terms ID_Header Literal and Trace_Header Literal.**
- **Define the term GPD.**
- **Describe the structure of an omega format seismic dataset.**
- **Describe the function of the following program Project Manager.**
- **Describe the directory structure of a Project in Omega2**

North Kuwait 2D Land Survey for Shell



So what happens next?

- Reformat
 - Gain
- Deconvolution
- Demultiple
- Migration
 - Stack

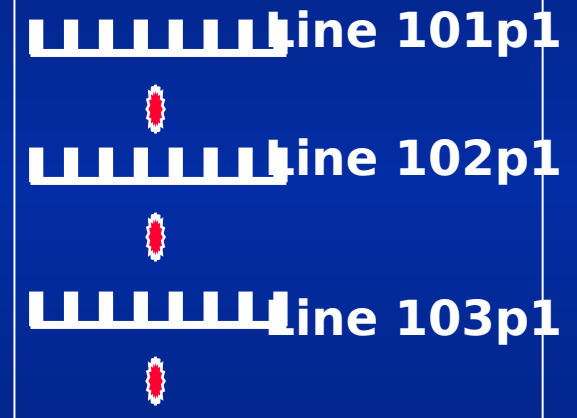
Project

Is the top level in the Omega2 hierarchy. It can be used to define the current contract that you are working on. Every time you get a new processing contract from a client you create a new project in the Omega2 database.

We could call the project Shell, but then what if 3 groups are all working on Shell projects. Can we have 3 projects all with the same name?

No

North Kuwait 2D Shell Survey



If we define a unique number for every new project that comes from a processing centre. So let's say the next unique number in our

D204

Survey

Is the second level in the Omega2 hierarchy. A Survey will represent data acquired at the same time in the same area.

We could define the Survey to be called **Kuwait_2D**.

now have a project **D204** which contains survey **Kuwait_2D**

D204

Kuwait_2D

North Kuwait 2D Shell Survey

line 101p1

line 102p1

line 103p1

Phase

Is the third level in the Omega2 hierarchy. There are currently only a limited number of phase types Field, Pre_migration, Migration and Post_Migration.

As our processing is going to include pre-migration and post-migration processes Lets use 2 phases pre_migration and post_migration. We now have a project **D204** which contains a survey **Kuwait_2D** and 2 phases **pre_migration** and **post_migration**

- Reformat
 - Gain
- Deconvolution
- Demultiple
- Migration
 - Stack

D204

Kuwait_2D

pre_migration

DP START Oslo
2004

post_migration

Stage

Is the fourth level in the Omega2 hierarchy. Stages define a processing algorithm that can be applied to the seismic data.

We could define the Stages **Reformat**,
Gain, **Deconvolution**, **Demultiple**,
Migration and **Stack**
D204

Kuwait_2D

pre_migration

Reformat Gain Deconvolution

Demultiple Migration
D204

Kuwait_2D

post_migration

Stack

- **Reformat**
- **Gain**
- **Deconvolution**
- **Demultiple**
- **Migration**
- **Stack**

Punit

Is the fifth level in the Omega2 hierarchy. It's a reference to a collection of seismic data that will be processed together. Its usually a swath or a sailline.

We could define the Punits
to be called **101p1,**

102p1 and **103p1**

now we can apply deconvolution to each of
acquired lines under

D204

Kuwait_2D

pre_migration

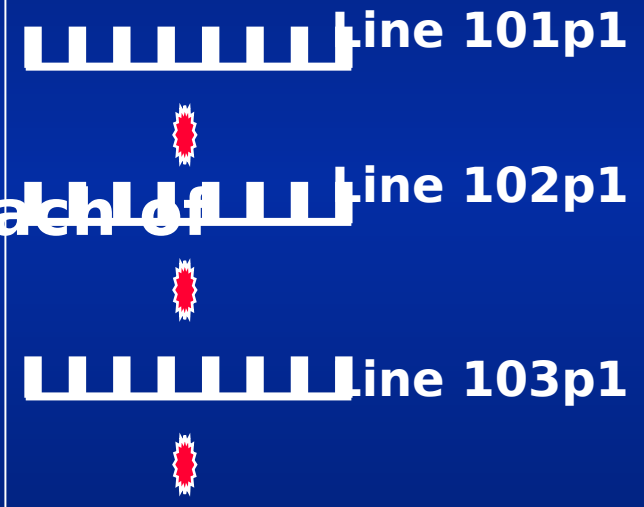
Deconvolution

101p1

102p1

103p1

North Kuwait 2D Shell Survey

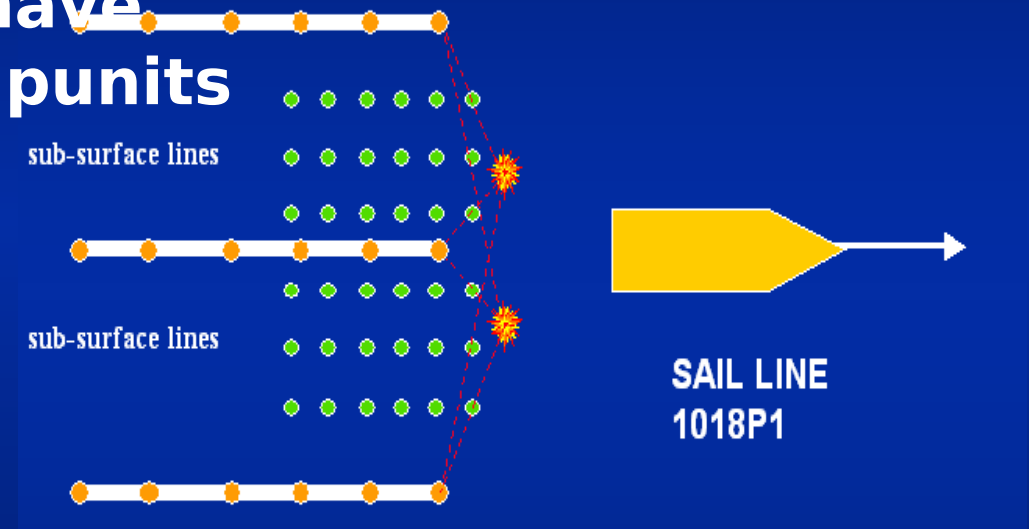


Child Punit

Is the sixth and lowest in the Omega2 hierarchy. Any punit can be further split into child punits. A typical example of a parent-child relationship is one of the subsurface lines associated with a sailline.

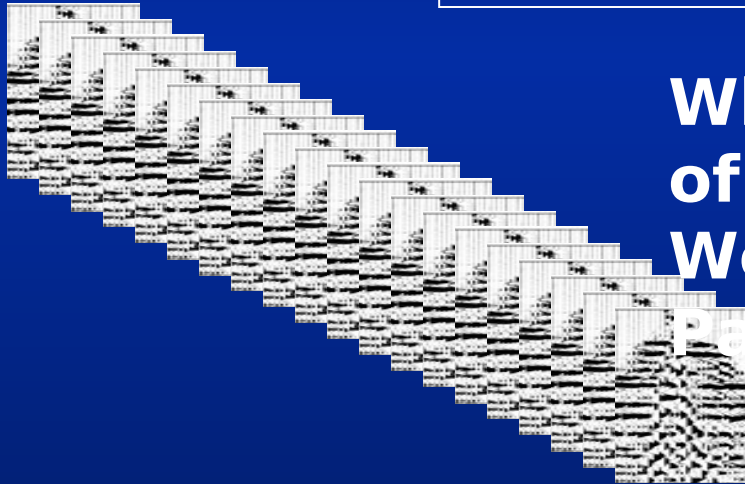
From this picture we would have
punit **1018P1** and six child punits

1018P1_1
1018P1_2
1018P1_3
1018P1_4
1018P1_5
1018P1_6



Lets start Processing

- **Reformat**
- **Gain**
- **Deconvolution**
- **Demultiple**
- **Migration**
- **Stack**



**What am I going to do with lots
of traces I know nothing about?
We need more than time amplitude
pairs.**

What do we need to know

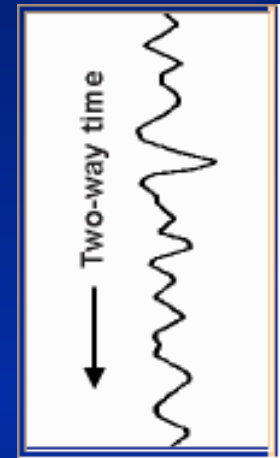
Which line was this trace acquired on?

What shotpoint caused this trace?

Where was the shotpoint located?

Which channel recorded this trace?

Where was the geophone located?



We store this information in a place we call

Header Literals

Header Literals

Lets look at our Kuwait survey again



Shotpoint no 101



Shotpoint no 101



Shotpoint no 101

Line_name	101p1	101p1		
Shotpoint_num	101	101	101	101
Field_channel_num	1	2	3	4
	5	6	7	8

Line_name	102p1	102p1		
Shotpoint_num	101	101	101	101
Field_channel_num	1	2	3	4
	5	6	7	8

Line_name	103p1	103p1		
Shotpoint_num	101	101	101	101
Field_channel_num	1	2	3	4
	5	6	7	8

Header Literals

There are 2 different types of Header Literals

- **ID Header Literals**

These are attributes which will remain the same for all traces on a tape eg sample interval, trace length, client name. In our example line_name

- **Trace Header Literals**

These are attributes which may change from trace to trace on a tape. In our example field_channel_num, and shotpoint_num.

Omega Trace Header Literals

- Uses a standard set of header names defined from a Literal Dictionary
- The dictionary defines ID or TRheader placement, storage type and default value
- Trace headers are dynamic. Hence no standard header template is used
- Literal names are limited to up to 20 characters including any extension
- Literals are accessed and updated by Omega modules and summarised in the documentation

Several types of trace header literal are available -

‘Single Element’ one value per literal (e.g **TRACE_NUM = 1**)

‘Multi Element’ many values per literal (e.g **SEISFLOAT = amp1, amp2, amp3 etc**)

‘Stemmed’ standard literal with extension (e.g **SOURCE_DETECT_DIST.N**)

Omega Trace Headers

the common Omega trace headers literals -

FIELD_FILE_NUM - field file number

FIELD_CHANNEL_NUM - field trace number

SHOTPOINT_NUM - source event number

TRACE_NUM - trace number (generated in processing)

IDENT_NUM - ensemble number (generated in processing)

SOURCE_DETECT_DIST - source-receiver offset

CMP - common mid-point number

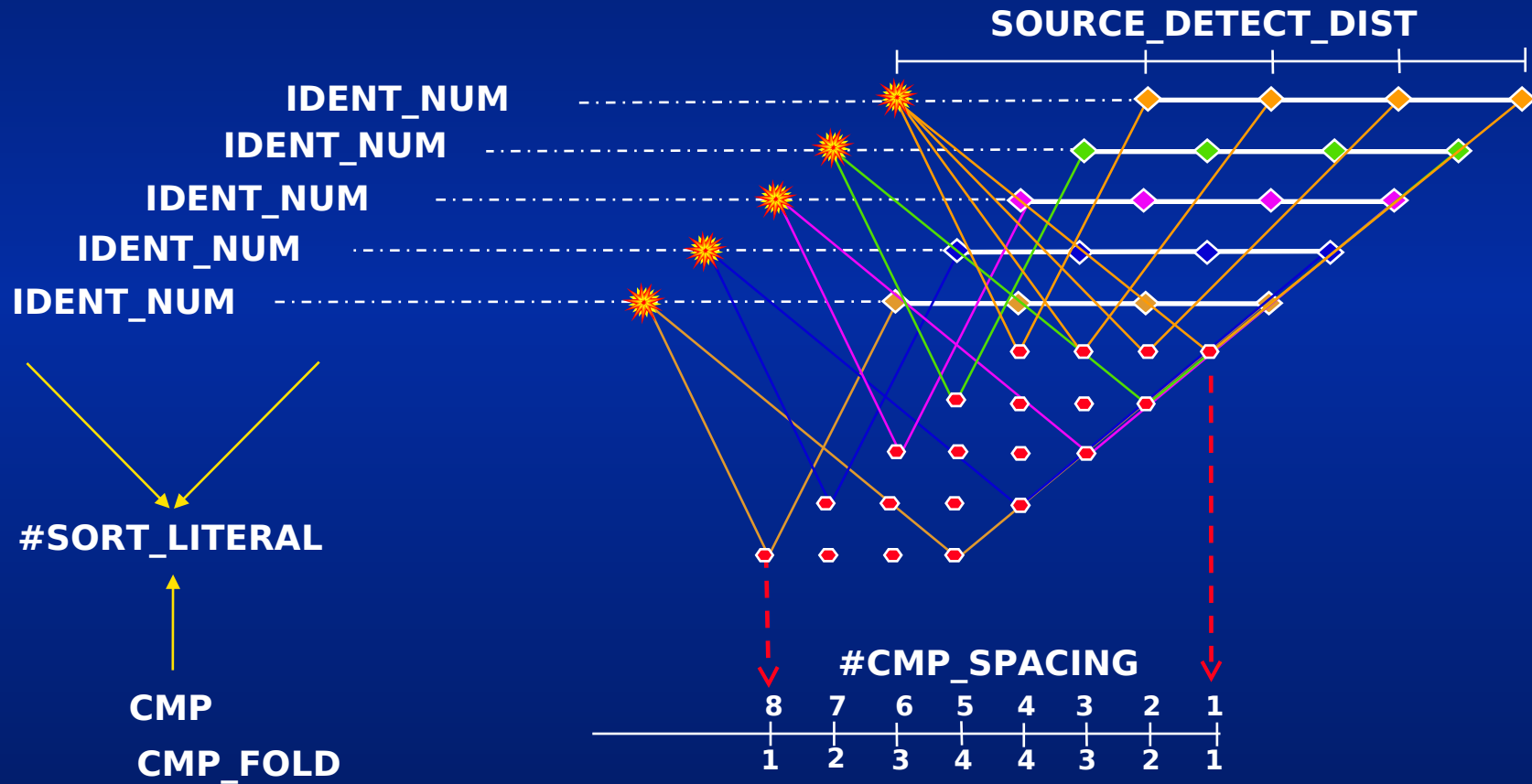
Header Literals

STRUCTURED FILE LITERAL NAME	CODE 4 LITERAL NAME	DATA TYPE	NULL VALUE	ORIGIN CODE
SOURCE_CODE	-----	I 4	-9999	1
Source Code. This number is unique for each source. This number should be generated from the source firing flags updated from the SEG D headers. If there are no source codes in the headers, these codes can often be generated from odd/even occurrences in the IDENT_NUM or SHOTPOINT_NUM literal, with provision for missed shots.				
SOURCE_DETECT_DIST	SSDD	R	-1.0 E+30	1
Signed Source-to-Detector Distance. Value in feet or meters. This value is the magnitude of the straight line distance between the source and detector array centers. Prestack only.***For VSP, this value is the magnitude of the distance between the projections of source and detector on a horizontal plane.				
SOURCE_FOLD	-----	I	-9999	1
Count of Live Traces per Source in Source Table. This Geometry Database Source Table value indicates the number of live traces at each source that were updated with geometry information.				
SOURCE_IDENTIFIER	-----	I	-9999	2
Source Location Type. Specifies how sources are identified in this data set.				
1 = Sources are identified only by STATION_NUM_SOURCE. There can be only one source per station number.				
2 = Sources are identified by a unique combination of the values of IDENT_NUM and STATION_NUM_SOURCE.				
3 = Sources are identified by a unique combination of the values of IDENT_NUM, STATION_NUM_SOURCE and MSR_GROUPED_SRC_NUM.				
Data Type: I - Integer R - Real (single precision) D - Real (double precision) Cn- Character of n length Origin Code: 0 - Other 1 - Trace Header 2 - Identification Header 3 - Navigation Identification Header 4 - Navigation Data 5 - Velocity File Header 6 - Spatial Parameter File				

Geometry - Literal Assignment

#STATION_SPACING = 50 #UNITS_OF_DISTANCE
#MAX_NUM_GATHERS = 5
#MAX_NUM_TRACES = 4

☀ SHOTPOINT_NUM
◇ STATION_NUM_DETECT
● TRACE_NUM



Global Parameter Database

The GPD allows the specification and storage of Project, Survey, Stage and Punit specific parameter variables. Its basically a way of storing even more information about a dataset that may not be in the trace headers. For example first read

	CLIENT	FID	FirstSP	LastSP	LID	Punit	SEQ_NUM
1006p1	KERR_MCGEE	1642	1642	895	895	1006p1	69
1018i1	KERR_MCGEE	1001	1001	1748	1748	1018i1	70
1018p1	KERR_MCGEE	1001	1001	1748	1748	1018p1	64
1030p1	KERR_MCGEE	1001	1001	1748	1748	1030p1	62
1030p2	KERR_MCGEE	1310	1310	1385	1385	1030p2	72
1042p1	KERR_MCGEE	1001	1001	1748	1748	1042p1	60

Data in Omega

Seismic data that we are going to process in omega is stored in the following format (remember a format is just a way of defining what information is stored where)

- **IDHEADER** table - a dynamic table containing literals that remain constant for the entire File (e.g. sample interval, trace length and client name)
- **HISTORY** table - a dynamic historical record of processing modules that have been used plus relevant filenames and dates
- **TRACE** table - a dynamic trace header containing changing literals and **Seismic Traces** amplitudes (e.g. geometric information like offsets, trace numbers)

types of this format seismic structured file **SFAM** and seismic disk input

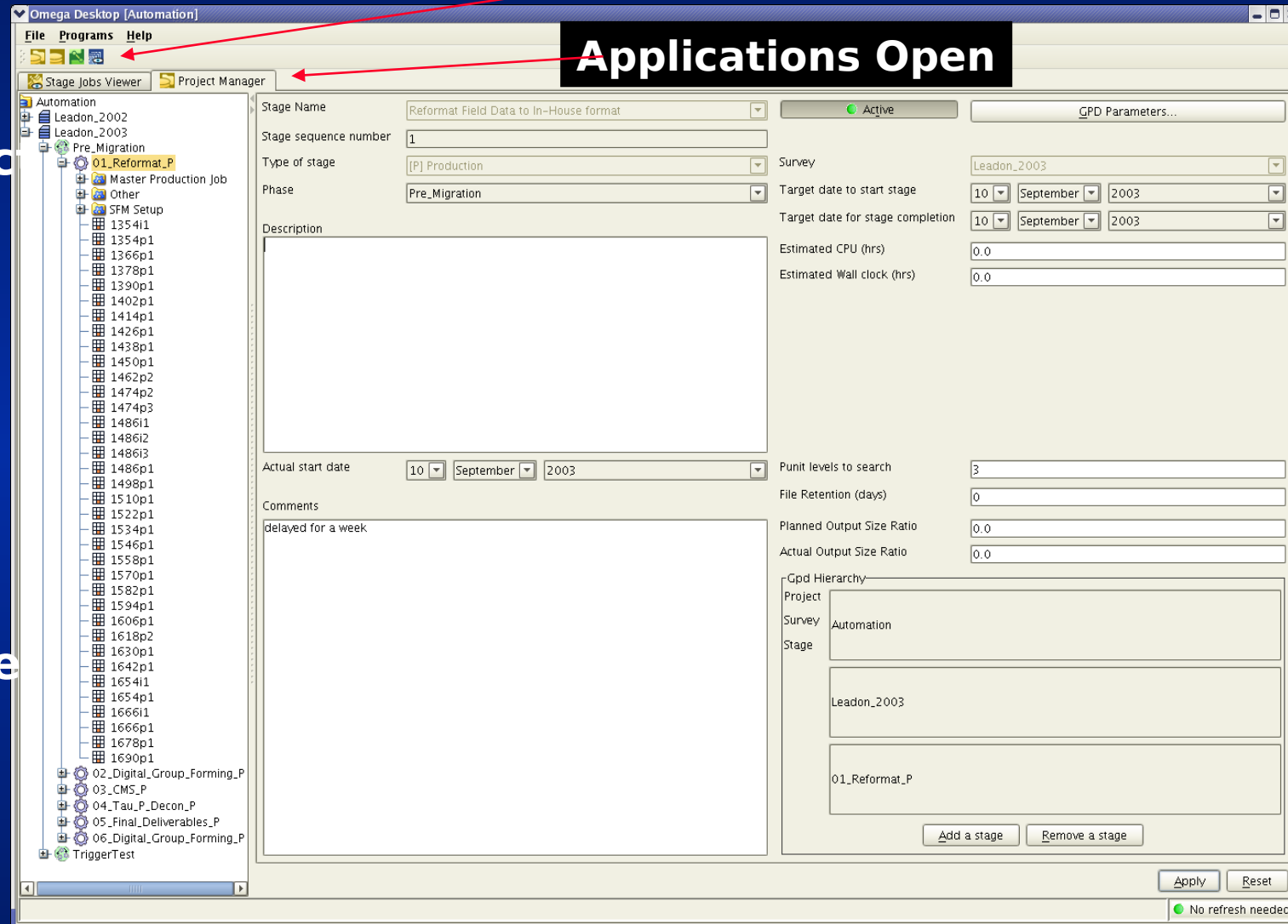
Omega 2 : The Desktop

Shortcut Icons on Toolbar

Main points

- One per project
- Applications open when desktop closed are reopened automatically.
- Most applications open within the desktop.

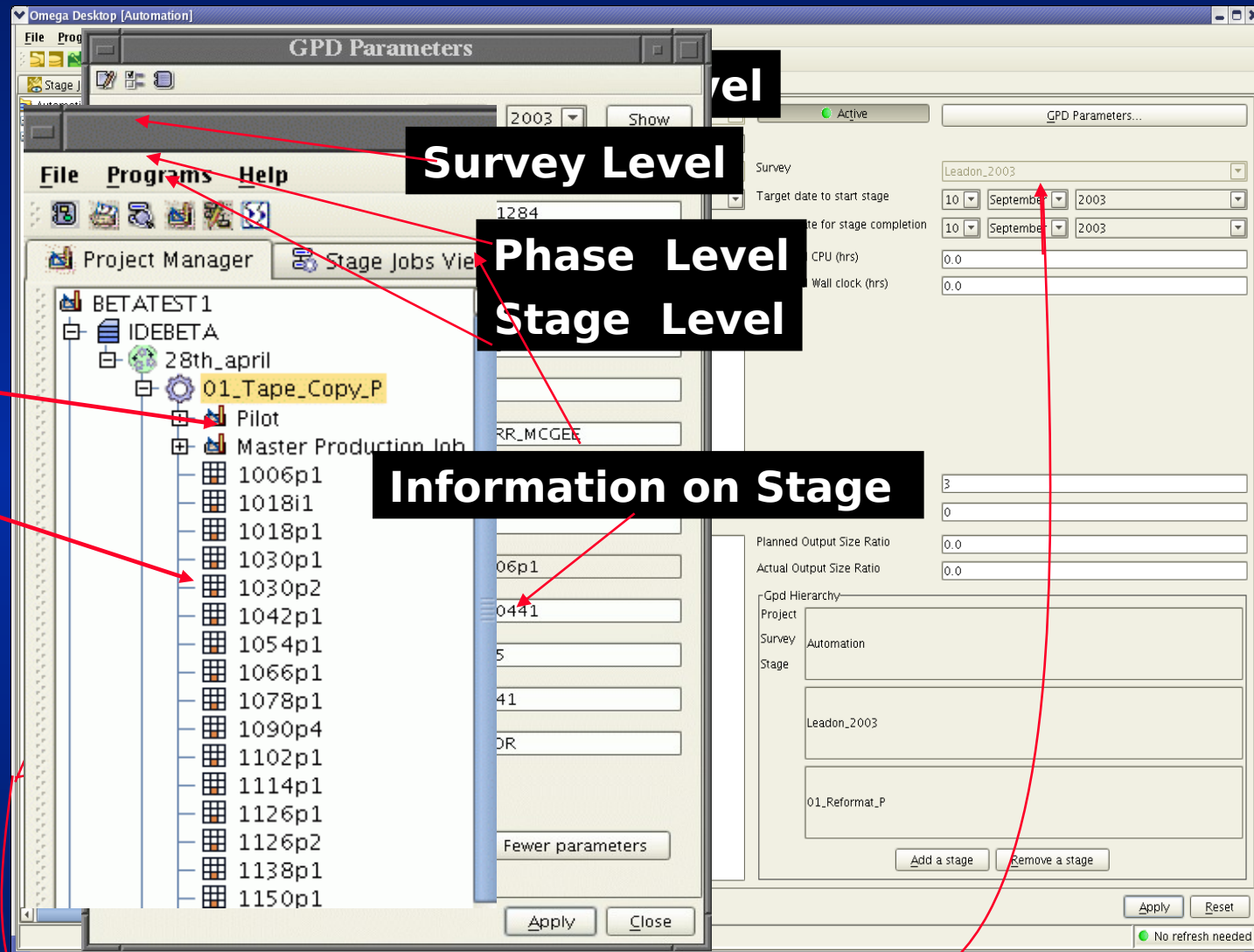
Applications Open



Omega 2 : Project Manager

Main points

- Builds project structure
- Information recorded
- Jobs
- Punits
- Directory structure is built
- GPD values can be seen, here at the Punit level



Omega 2 : Global Parameter Database (GPD)

Main points

- User assigns values to variables
- Standard list of variables

Punit Level

GPD editor

File Edit Tools Help

EQUATION EDITOR =

	Parameter Names	Parameter Values
BETATEST1		
	Base_Directory	/ud/pilot/
NASBETA		
	Trace_Edits	'/ud/pilot/alphatest_leadon/sfm_tables/' + gpd('Punit') + '.SS_TRCDEL.txt'
	ID_INC	if (gpd(LID) > gpd(FID), 1, -1)
	Survey	NASBETA
	Shot_Edits	'/ud/pilot/alphatest_leadon/sfm_tables/SO' + gpd('SEQ_NUM') + '.TRCDLRV.DELREYDEF.tr_edit.txt'
01_Digital_Grp_Forming		
	Stage	Digital_Grp_Forming
	LO_ID	min([gpd(FID), gpd(LID)])
	HI_ID	max([gpd(FID), gpd(LID)])

	CLIENT	FID	FirstSP	LastSP	LID	Punit	SEQ_NUM	User1	LO_ID
1006p1	KERR_MCGEE	1642	1642	895	895	1006p1	69	2	895
1018i1	KERR_MCGEE	1001	1001	1748	1748	1018i1	70	3	1001
1018p1	KERR_MCGEE	1001	1001	1748	1748	1018p1	64	4	1001
1030p1	KERR_MCGEE	1001	1001	1748	1748	1030p1	62	2	1001
1030p2	KERR_MCGEE	1310	1310	1385	1385	1030p2	72	3	1310
1042p1	KERR_MCGEE	1001	1001	1748	1748	1042p1	60	4	1001
1054p1	KERR_MCGEE	1001	1001	1748	1748	1054p1	54	2	1001
1066p1	KERR_MCGEE	1001	1001	1748	1748	1066p1	52	3	1001
1078p1	KERR_MCGEE	1001	1001	1748	1748	1078p1	50	4	1001
1090p4	KERR_MCGEE							2	1001
1102p1	KERR_MCGEE							3	1001
1114p1	KERR_MCGEE							4	1001
1126p1	KERR_MCGEE							2	1001
1126p2	KERR_MCGEE							3	1466
1138p1	KERR_MCGEE	1001	1001	1748	1748	1138p1	31	4	1001
1150p1	KERR_MCGEE	1001	1001	1748	1748	1150p1	29	2	1001
1162p1	KERR_MCGEE	1001	1001	1748	1748	1162p1	27	3	1001
1174p1	KERR_MCGEE	1001	1001	1748	1748	1174p1	21	4	1001
1186p1	KERR_MCGEE	1001	1001	1748	1748	1186p1	19	2	1001
1198p2	KERR_MCGEE	1001	1001	1748	1748	1198p2	3	3	1001
1210p1	KERR_MCGEE	1001	1001	1748	1748	1210p1	5	4	1001
1222p1	KERR_MCGEE	1001	1001	1748	1748	1222p1	7	2	1001
1234p1	KERR_MCGEE	1001	1001	1748	1749	1234p1	9	3	1001
1246p1	KERR_MCGEE	1001	1001	1748	1748	1246p1	11	4	1001
1258p1	KERR_MCGEE	1001	1001	1748	1748	1258p1	13	2	1001

Equation at Stage Level shown resolved for each Punit

Project Level

Survey Level

Stage Level

Desktop and Project Manager Exercise

Directory Structure in Omega2

The Project directory can contain many surveys

/local2/data/train1/Leadon2002
/local2/data/train1/SURVEY1

Directory Structure in Omega2

The Survey directory then contains lots of directories

3d_visualisation_files (omegavu cubes) (segd and segy)	seismic_other
attribute_files	setups (Seisflow
setups)	
bitmap_files	sfm_setups
dbase	sfm_tables
geometry_files	spatial_attrib_files
plot_files (qcviewer and cgm viewer)	static_files
printout_files (logs from seisflow runs)	text_files
progressive_files (dmo and stack)	velocity_files
seismic_data (sfam and dio)	wavelet_files (source
signatures)	
	window_files

Directory Structure in Omega2

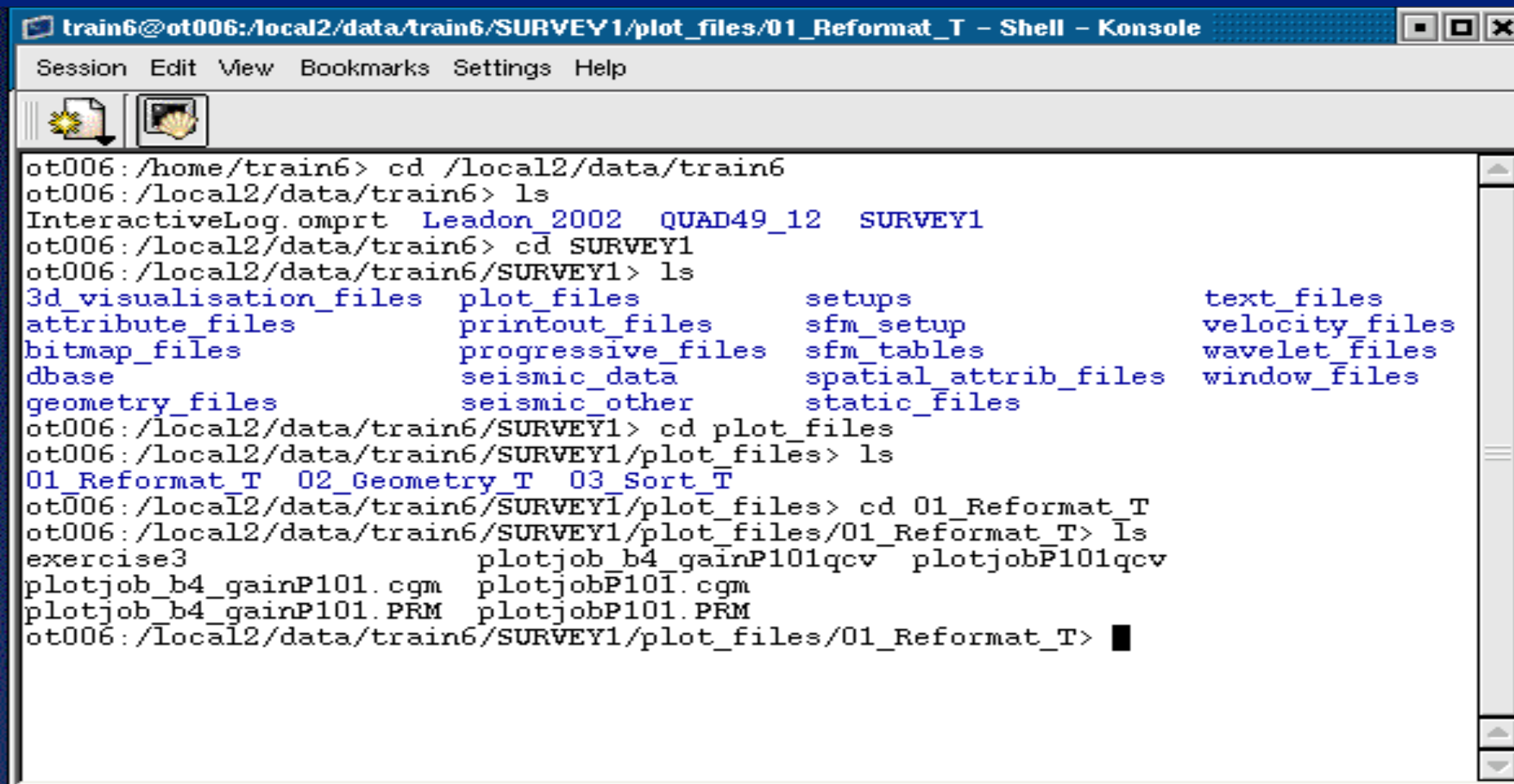
Each of these directories in turn contains a directory for each stage

01_Reformat_T 02_Geometry_T 03_Sort_T

and the files that you have created.

Directory Structure in Omega2

So from our exercise here's an example directory structure.



```
train6@ot006:/local2/data/train6/SURVEY1/plot_files/01_Reformat_T - Shell - Konsole
Session Edit View Bookmarks Settings Help

ot006:/home/train6> cd /local2/data/train6
ot006:/local2/data/train6> ls
InteractiveLog.omprt  Leadon_2002  QUAD49_12  SURVEY1
ot006:/local2/data/train6> cd SURVEY1
ot006:/local2/data/train6/SURVEY1> ls
3d_visualisation_files  plot_files          setups              text_files
attribute_files         printout_files      sfm_setup           velocity_files
bitmap_files            progressive_files    sfm_tables          wavelet_files
dbase                   seismic_data        spatial_attrib_files window_files
geometry_files          seismic_other        static_files
ot006:/local2/data/train6/SURVEY1> cd plot_files
ot006:/local2/data/train6/SURVEY1/plot_files> ls
01_Reformat_T  02_Geometry_T  03_Sort_T
ot006:/local2/data/train6/SURVEY1/plot_files> cd 01_Reformat_T
ot006:/local2/data/train6/SURVEY1/plot_files/01_Reformat_T> ls
exercise3          plotjob_b4_gainP101qcv  plotjobP101qcv
plotjob_b4_gainP101.cgm  plotjobP101.cgm
plotjob_b4_gainP101.PRM  plotjobP101.PRM
ot006:/local2/data/train6/SURVEY1/plot_files/01_Reformat_T> █
```

At the end of this Session, you will be able to:

- **Describe the function of the following programs Seisflow and Printout Viewer.**
- **Define the terms sfm and processing workflow.**

Seismic Function Modules (SFM)

Seismic Function Modules (SFM) are the building blocks through which you define a processing flow.

- SFMs contain a group of parameters related to a single processing task. Each task is specific to an operation or some logical subset of that operation.
- For example, the INPUT SFM contains the parameters needed to define the input dataset. The STRTIMES SFM contains the parameters needed to define the begin time for each trace.



SFM Parameter Editor

Parameters for each SFM are defined in the parameter editor

Parameter Editor Module Selector

Process Unit: []

Expression: []

☐ INPUT

☐ Input File Information

Media Type for Storage: 12345

Successful Step Table File Disposition: KEEP

Failed Step Table File Disposition: KEEP

☐ Table of Input Files

	Input File Name	Volume Serial Number List
1	/data01/test	COMPUTED

☐ Input Tape Information

☐ Input Tape Spooling

☒ Units

☒ General

☒ Gathers

☐ Access Order

☐ Turbo Buffers

☒ Tape Read Error Recovery

☐ Tape Attribute Table Summary

Parameters

There are three types of parameter sets:

- **Default.** Parameter values are required but will default if not specified.
- **Required.** Parameter values are required and must be specified - there is no default. The sfm will remain pink until you fill in all the required parameters.
- **Optional.** Parameter values may be specified but are not required.

Typical Practice

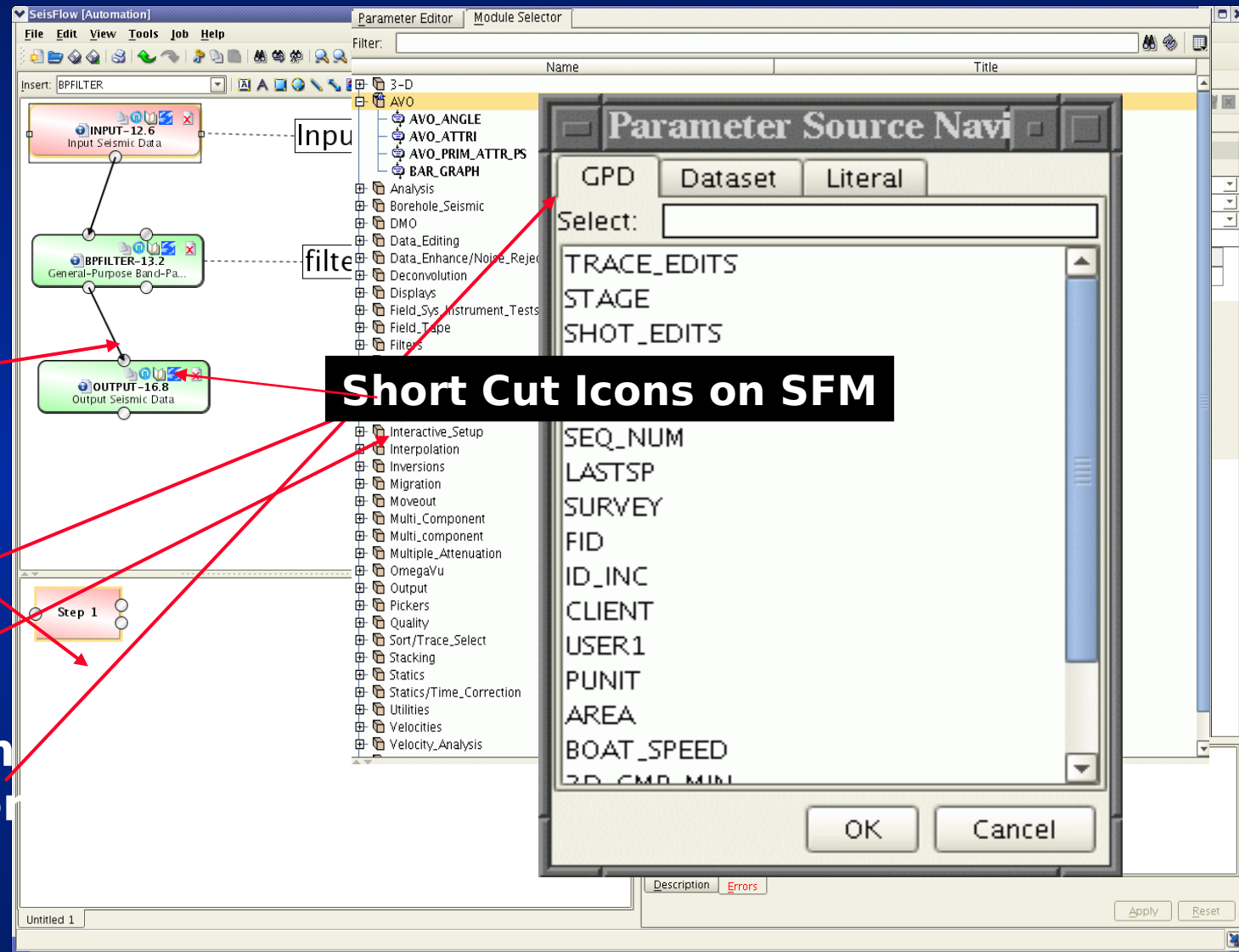
- You typically do not create new flow for each job. Rather, you maintain a database of flows from which you can:
 - Copy and edit existing flows and setups (using the Edit menu).
 - Merge flows (using Copy/Paste or Retrieve options on the File menu).
 - Import and Export SFM setups (using the SFM Actions menu).

NOTE: When you edit an existing flow, it is a good practice to first rename the new flow using the Save_As option under the File menu. This practice ensures you do not accidentally overwrite your original setup information.

Omega 2 : SeisFlow

Main points

- Job builder
- Display area
 - Flow
 - MultiStep
 - Parameter Editor
 - Module Selector
- Information from GPD, Literals, ID or Trace Header easy to get from parameter editor



Seisflow Exercise

At the end of this Session, you will be able to:

- **Describe the function of the following programs Stage Jobs Viewer, Seisview, Traceheader View, Qcviewer, CGM Viewer, and Dataset Manager**

Omega 2 : Printout Viewer

Main points

- Printout QC
- Display area
 - Tree look
 - Flow look
 - Printout
 - Setup
 - QC Status

The screenshot displays the Omega 2 Printout Viewer interface. On the left is a flowchart titled 'job.log' with a 'Log' and 'Flow' tab. The flowchart contains several steps, including 'INPUT-1.2.1 Input Seismic Data', 'IDHMOD-5.3 Identification Header Mod...', 'TRACE_SUMMARY-9.4 Trace Summary Report', 'TRACE_HEADER_MOD-6.3 Trace Header Modify', 'STRTIMES-9.4 Start Times', 'SWELL_NOISE_ATTEN-4.4 Swell Noise Attenuation', 'TRCDLVR-1.2.4 Trace Delete and Polarity...', and 'DCN_OPR_APPLY-5.7 Deconvolution Operator A...'. On the right is a printout window titled 'INPUT' with a green header bar. It contains a table for 'MASTER GRID DEFINITION' and a section for 'PROCESSING GRID # 1'. The printout window has a status bar at the bottom showing 'log_files\03_Merge_P\LPT_J2\CMS_B03_1030p2\RUN003\job.log Last QC...' and a 'QC Status' dropdown menu. Red arrows point from the main points list to specific elements: 'Printout QC' points to the 'TRACE_SUMMARY-9.4' step; 'Tree look' points to the flowchart; 'Flow look' points to the 'TRACE_HEADER_MOD-6.3' step; 'Printout' points to the 'MASTER GRID DEFINITION' table; 'Setup' points to the 'DCN_OPR_APPLY-5.7' step; and 'QC Status' points to the 'QC Status' dropdown menu. Two text boxes are overlaid on the printout window: 'Red colour = Error reported' points to a red line in the 'MASTER GRID DEFINITION' table, and 'Yellow colour = Warning reported' points to a yellow line in the 'PROCESSING GRID # 1' section.

Red colour = Error reported

Yellow colour = Warning reported

*** MASTER GRID DEFINITION ***			
X	Y	PRIMARY ORDINAL	SECONDARY ORDINAL
CELL SIZE	PRIMARY	6.2500	SECONDARY
ORDINAL INCREMENT	1.0000		12.5000

*** PROCESSING GRID # 1 ***	
NAME: MASTER GRID	
FILE_NAME	VOLSEERS
/NFS/naus/ISS/ETATEST1_NASBETA/seismic_data/01_Digital_Grp_Forming_P/L10J1_1030p2_laona_tr	COMPUTED

log_files\03_Merge_P\LPT_J2\CMS_B03_1030p2\RUN003\job.log Last QC... QC Status: Update

Printout Viewer Exercise

Omega 2 : Job Monitoring and Production Processing

• Stage Jobs Viewer

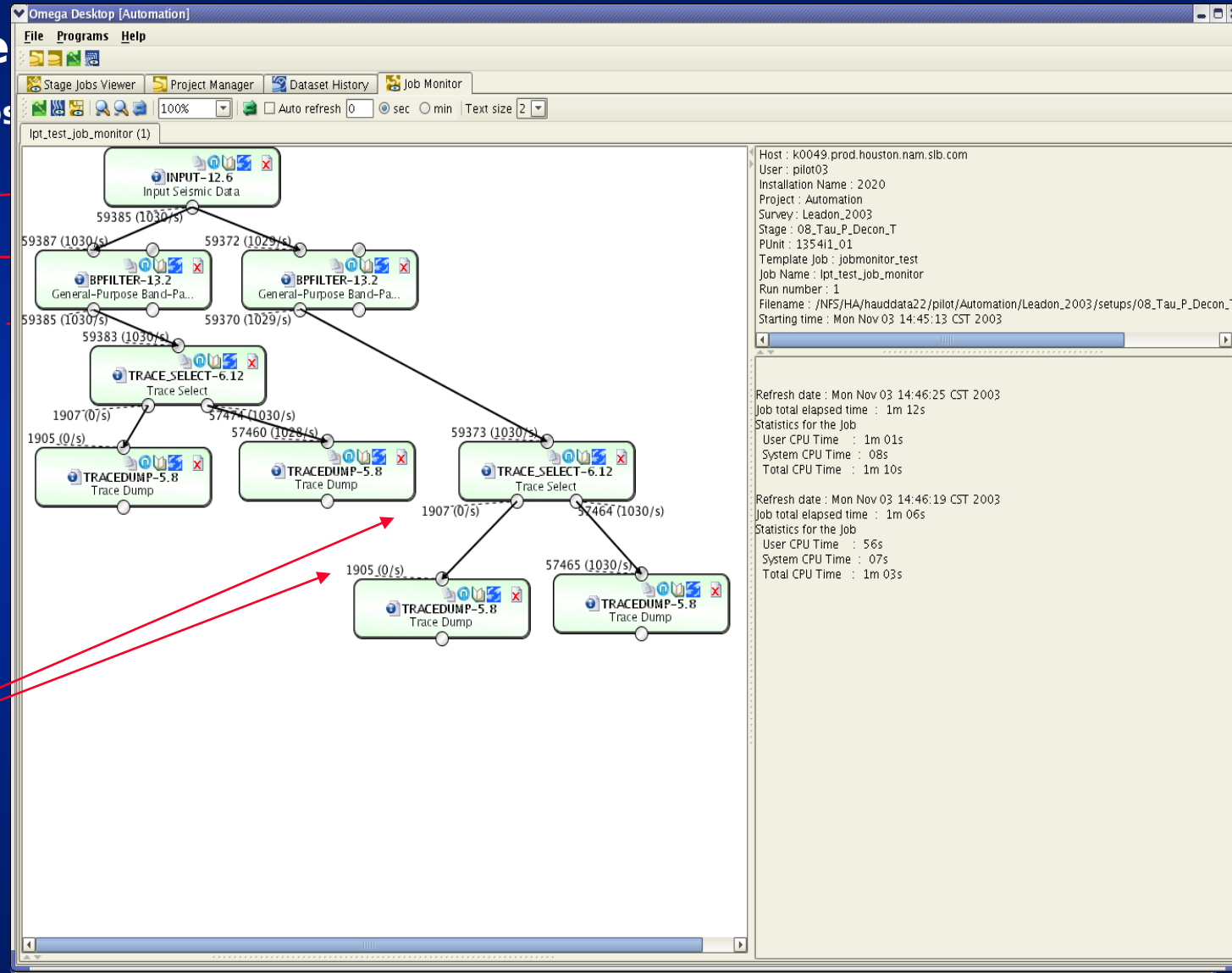
All the information on Jobs for a Stage

- Status of jobs shown
- Automatic checking of printout
- Options to view job information

• Real Time Job Monitor

- Trace Counts shown for each

Seismic Module



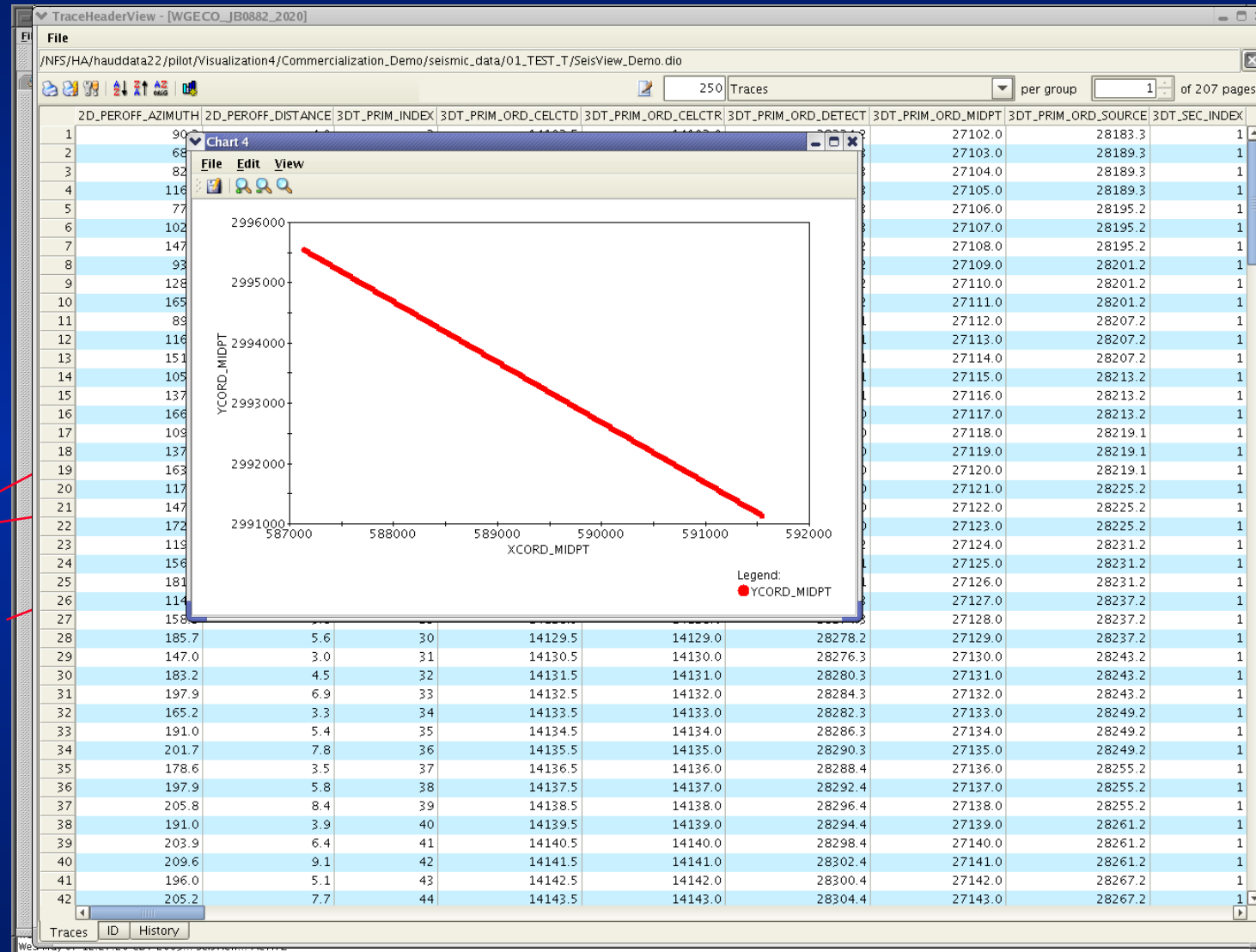
Stage Jobs Viewer Exercise

Trace Header View Exercise

Omega 2 : SeisView and TraceHeader Dump

Main Points

- Allows viewing seismic data without running jobs. Can access and display datasets as they are generated
- Examples of options
 - Header dump
 - Difference options
 - TraceHeader Dump
 - Spreadsheet view of values



QCviewer CGM Viewer Exercise

SeisView Exercise

Omega 2 : Dataset Manager

Main points

• Records info on all datasets
• Organised in 3 views

- Stage
- Punit
- Storage

Omega Desktop [BETATEST1]

File Programs Help

Project Manager Dataset Manager Job Summary Viewer Stage Jobs Viewer Log Viewer StageFlow Dataset History

Current Filter: Default - Active Seismic & Plot Files

Stage View	Processing Unit View	Storage View	Stage	Processing Unit	Name	Created	Created	Status	Current Stat	Type	Data For
BETATEST1			02_Digital_Grp_Forming	1390p1	/k0050/L10J1.1390p1_cms_data_test	Mon Jun 09 17:57:43 CDT 2003	pilot03	Active	Created	Seismic	SFAM
IDEBETA			02_Digital_Grp_Forming	1390p1	/k0050/L10J1.1390p1.lacona_trace_drop	Mon Jun 09 17:57:43 CDT 2003	pilot03	Active	Created	Seismic	SFAM
01_Tape_Copy_P			02_Digital_Grp_Forming	1342u2	/k0062/L10J1.1342u2_cms_data_test	Wed Jun 11 03:06:35 CDT 2003	pilot03	Active	Created	Seismic	SFAM
02_Digital_Grp_Forr			02_Digital_Grp_Forming	1342u2	/k0062/L10J1.1342u2.lacona_trace_drop	Wed Jun 11 03:06:35 CDT 2003	pilot03	Active	Created	Seismic	SFAM
03_Digital_Grp_Forr			02_Digital_Grp_Forming	1618p2	/k0065/L10J1.1618p2_cms_data_test	Wed Jun 11 02:59:05 CDT 2003	pilot03	Active	Created	Seismic	SFAM
04_Merge_P			02_Digital_Grp_Forming	1306p1	/k0047/L10J1.1306p1.lacona_trace_drop	Tue Jun 10 16:40:40 CDT 2003	pilot03	Active	Created	Seismic	SFAM
05_Merge_Q			02_Digital_Grp_Forming	1306p1	/k0047/L10J1.1306p1_cms_data_test	Tue Jun 10 16:40:45 CDT 2003	pilot03	Active	Created	Seismic	SFAM
06_Taup_P			02_Digital_Grp_Forming	1522p1	/k0056/L10J1.1522p1_cms_data_test	Tue Jun 10 17:19:03 CDT 2003	pilot03	Active	Created	Seismic	SFAM
07_Taup_Q			02_Digital_Grp_Forming	1522p1	/k0056/L10J1.1522p1.lacona_trace_drop	Tue Jun 10 17:19:03 CDT 2003	pilot03	Active	Created	Seismic	SFAM
08_Radon_P			02_Digital_Grp_Forming	1270p1	/k0046/L10J1.1270p1_cms_data_test	Wed Jun 11 04:42:29 CDT 2003	pilot03	Active	Created	Seismic	SFAM
09_Radon_Q			02_Digital_Grp_Forming	1270p1	/k0046/L10J1.1270p1.lacona_trace_drop	Wed Jun 11 04:42:29 CDT 2003	pilot03	Active	Created	Seismic	SFAM
NASBETA			02_Digital_Grp_Forming	1138p1	/k0040/L10J1.1138p1_cms_data_test	Tue Jun 10 15:21:57 CDT 2003	pilot03	Active	Created	Seismic	SFAM
PPMDEMO			02_Digital_Grp_Forming	1138p1	/k0040/L10J1.1138p1.lacona_trace_drop	Tue Jun 10 15:21:57 CDT 2003	pilot03	Active	Created	Seismic	SFAM
TriggeringTest			02_Digital_Grp_Forming	1330i1	/k0060/L10J1.1330i1_cms_data_test	Tue Jun 10 13:24:08 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1330i1	/k0060/L10J1.1330i1.lacona_trace_drop	Tue Jun 10 13:24:08 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1078p1	/k0037/L10J1.1078p1_cms_data_test	Mon Jun 09 18:39:55 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1078p1	/k0037/L10J1.1078p1.lacona_trace_drop	Mon Jun 09 18:39:55 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1438p1	/k0052/L10J1.1438p1_cms_data_test	Tue Jun 10 15:08:04 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1438p1	/k0052/L10J1.1438p1.lacona_trace_drop	Tue Jun 10 15:08:04 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1462p2	/k0053/L10J1.1462p2.lacona_trace_drop	Tue Jun 10 16:46:14 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1462p2	/k0053/L10J1.1462p2_cms_data_test	Tue Jun 10 16:46:15 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1558p1	/k0057/L10J1.1558p1_cms_data_test	Wed Jun 11 04:41:27 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1558p1	/k0057/L10J1.1558p1.lacona_trace_drop	Wed Jun 11 04:41:27 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1354p1	/k0048/L10J1.1354p1_cms_data_test	Tue Jun 10 15:22:07 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1354p1	/k0048/L10J1.1354p1.lacona_trace_drop	Tue Jun 10 15:22:07 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1666i1	/k0064/L10J1.1666i1_cms_data_test	Wed Jun 11 06:09:07 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1666i1	/k0064/L10J1.1666i1.lacona_trace_drop	Wed Jun 11 06:09:08 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1174p1	/k0042/L10J1.1174p1_cms_data_test	Tue Jun 10 15:30:48 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1174p1	/k0042/L10J1.1174p1.lacona_trace_drop	Tue Jun 10 15:30:48 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1486i2	/k0064/L10J1.1486i2_cms_data_test	Tue Jun 10 08:50:39 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1486i2	/k0064/L10J1.1486i2.lacona_trace_drop	Tue Jun 10 08:50:39 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1654p1	/k0066/L10J1.1654p1_cms_data_test	Tue Jun 10 05:35:07 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1654p1	/k0066/L10J1.1654p1.lacona_trace_drop	Tue Jun 10 05:35:07 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1186p1	/k0042/L10J1.1186p1_cms_data_test	Mon Jun 09 18:38:57 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1186p1	/k0042/L10J1.1186p1.lacona_trace_drop	Mon Jun 09 18:38:57 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1114p1	/k0039/L10J1.1114p1_cms_data_test	Mon Jun 09 18:34:25 CDT 2003	pilot03	Active	Created	Seismic	SFAM
			02_Digital_Grp_Forming	1114p1	/k0039/L10J1.1114p1.lacona_trace_drop	Mon Jun 09 18:34:25 CDT 2003	pilot03	Active	Created	Seismic	SFAM

Total size = 709Gb Selected size = 2Mb

No refresh needed

Omega 2 : Dataset Manager

Main points

- Records info on all datasets
- Organised in 3 views
- Stage
- Punit
- Storage
- Plot of information
- Literal info on seismic datasets

	Count	Max Value	Min Value	First Value	Last Value	
3DT_PRIM_INDEX	22/90	4443.0	1882.0	2212.0	2201.0	1
3DT_PRIM_ORD_CELCTR	22/90	5243.0	2682.0	3012.0	3001.0	1
CMP	43/90	3286312.0	-9999.0	1750212.0	3001401.0	69
CMP_NUM_DETECT	22/90	3327370.0	0.0	1768602.0	3024731.0	134
CMP_NUM_SOURCE	22/90	3250616.0	366539.0	1727223.0	2978072.0	135
FIELD_FILE_NUM	43/90	2.16235737E8	878.0	2.16232522E8	2.11032058E8	490
FIELDSHOT_ID	43/90	2.17000044E8	2.05054218E8	2.16232522E8	2.11032057E8	490
FLD_CABLE_NUM	43/90	6.0	0.0	1.0	6.0	
IDENT_NUM	43/90	1774.0	1.0	1.0	748.0	
SHOTPOINT_NUM	43/90	1774.0	878.0	1001.0	895.0	
SOURCE_DETECT_DIST	22/90	4125.5087	133.3129	180.0509	4117.3101	9
STACK_WORD	43/90	11.0	0.0	11.0	11.0	
STATION_NUM_DETECT	43/90	5757.0	0.0	1275.0	4489.0	6
STATION_NUM_MIDPT	22/90	3286312.0	315761.0	1750212.0	3001401.0	135
STATION_NUM_SOURCE	43/90	5805.0	0.0	1323.0	5805.0	8
TIME_OF_DAY	43/90	2316633.0	5.0	2303266.0	204887.0	35
TIME_SHIFT_ALIGNMENT	43/90	-2.0	-2.0	-2.0	-2.0	
TRACE_NUM	43/90	7951.0	4.0	4.0	3838.0	4
WATER_DEPTH_SOURCE	43/90	122.4	110.9	117.2	118.5	
XCORR_DETECT	22/90	438613.1	438153.3	434185.3	437633.3	10

Dataset Manager Exercise

At the end of this Week, you will be able to:

- **Define the terms Project, Survey, Phase, Stage, Punit and Child Punit.**
- **Define the terms ID Header Literal and Trace Header Literal.**
- **Define the term GPD.**
- **Describe the structure of an omega format seismic dataset.**
- **Describe the directory structure of a Project in Omega2**
- **Describe the function of the following programs Project Manager, Seisflow, Printout Viewer, Stage Jobs Viewer, Seisview, Traceheader View, Qcviewer, CGM Viewer, and Dataset Manager**
- **Define the terms sfm and processing workflow.**